Proposed Process

Development of Regional Mitigation Goals & Objectives, Selection and Screening of Candidate Tools and Sites to Direct Off-site Mitigation Investments

Scope

For *unavoidable impacts* that BLM determines warrant compensatory off-site mitigation, the BLM will describe mitigation *goals* for the effected ecosystem and the ecoregion. The BLM will define specific and measurable *regional objectives* that tier to general goals. Clearly elaborated regional mitigation objectives should provide strategic direction and qualify the priority-setting criteria for screening *how* and *where* off-site mitigation fees will be invested.

Regional mitigation objectives should, by definition, be founded on an understanding of the affected ecosystem and landscape-scale condition, trends, and potential. BLM should clarify early on how regional mitigation objectives are *additive t*o current land management obligations (e.g., how do mitigation objectives build on, rather than replace, business-as-usual land management) and the *durability* of mitigation investments, in terms of future land management decisions, resource allocation or special designation and funding, will be addressed.

When feasible, regional mitigation objectives should address combined impacts of solar energy development to biological, ecological, cultural, recreation and visual resources, multiple use, and as appropriate, socioeconomic factors. Regional mitigation objectives should furthermore be developed to enhance the ability of state and federal agencies to invest in larger scale conservation and mitigation efforts through the pooling of financial resources and prioritization of investments. The BLM seeks to establish regional mitigation plans and objectives that result in equitable allocation of costs among developers proposing development in SEZs so as not to inadvertently dis-incentivize use of SEZs.

In meeting regional objectives as part of a regional mitigation plan, BLM will screen and select from the range of mitigation tools or approaches available to the agency. Proximity to impacts in SEZs will not be a limiting factor in identifying mitigation objectives and possible investments. Rather, the BLM will give priority to sites that present the best options for successful mitigation and conservation benefits (exceptions may include impacts on groundwater where mitigation investments would typically be limited to the affected basin and/or target aquifer).

BLM regional mitigation objectives will be developed transparently, in conjunction with, and engaging other federal, state, and local agencies; tribes; and other interested public stakeholders. Over time, achievement of regional objectives will be informed by output from the BLM's Solar long-term monitoring program.

Process - Regional Mitigation Goal and Objective Development

For each unavoidable impact that warrants off-site mitigation:

1. *Document existing FLPMA, ESA, CWA, or other land management and resource protection goals, objectives, or management direction*:

    a. Reference and develop a crosswalk to existing management directions on land use, resource protection, and conservation goals and/or objectives defined in existing:
        - BLM Resource Management Plans (RMPs)
        - FWS Habitat Conservation Plans (HCPs),
        - State Wildlife Action Plans (SWAPs),
        - Other federal, state, or local planning documents as appropriate (e.g., EPA)

    b. Examples:
        i. BLM Las Vegas RMP (1998): Manage habitats for non-listed special status species to support viable populations so that future listing would not be necessary (Objective SS-2).
        ii. USFWS Revised Desert Tortoise Recovery Plan (2011):
            1. Maintain self-sustaining populations of desert tortoises within each recovery unit into the future (Objective 1 – Demography)
            2. Maintain well distributed populations of desert tortoises throughout each recovery unit (Objective 2 – Distribution)
            3. Ensure that habitat within each recovery unit is protected and managed to support long-term viability of desert tortoise populations (Objective 3 - Habitat)

2. *Articulate overarching regional mitigation goal(s), or desired end point(s).*

    a. Regional mitigation planning goals should provide context in terms of geographic scales in the range of 2–3 million acres (8,000–12,000 km2; ecological subregion).

    b. Examples:
        - *Goal:* Restore large desert tortoise habitat blocks within the Eastern Mojave Desert Ecoregion to maintain ecological function and biological diversity;
        - *Goal:* Protect localized habitats or large habitat areas in the Eastern Mojave Desert Ecoregion to support viable populations of impacted special status species;
        - *Goal:* Maintain a range of environmental gradients in the Great Basin Ecoregion to provide for shifting species distributions and change;
        - *Goal:* Restore ecosystem function in Sonoran Desert Ecoregion;
        - *Goal*: Protect National Historic Trail cultural settings and viewsheds in the Lower Rio Grande Valley, Chihuahua Desert Ecoregion; and
        - *Goal:* Maintain recreational hunting settings and conservation of critical big game winter range in the San Luis Valley, Southern Rockies Ecoregion).

3. *Identify opportunities to develop a "holistic" or complimentary approach to regional mitigation objective-setting and implementation strategy.*

    a. Look beyond the individual resource mitigation goals to ecosystem process and functions that benefit the resouce
    b. Consider opportunities to accomplish biological resource conservation and other goals with one objective.
    c. Example:
        i. A regional mitigation goal to restore Desert Mojave ecosystems degraded from non-system motorized recreation may also advance goals to maintain and/or recover special status species habitat as well as enhance or recover visual resource values.

4. *Define at least one specific, measureable regional mitigation objective*.

    a. Define regional mitigation objectives in terms of possible:
        i. Restoration
        ii. Acquisition
        iii. Protection
        iv. other
    b. Clarify the means and temporal scale by which mitigation objective are additional to current activities and how durability of mitigation investment will be ensured
        i. Land management action
        ii. Funding
        iii. Land classification designation
    c. Example(s):
        i. *Goal:* Offset the loss of ecosystem services (cover, forage, run-off and erosion control, views) on public lands in the Eastern Mojave Desert resulting Dry Lake SEZ development through restoration of degraded lands in comparable critical habitat.
        ii. *Objective (Restoration):* Restore creosote bursage vegetation, burn scar, closed road within the Gold Butte ACEC through a SEZ mitigation restoration activity account spread over the 30-year ROW grant period. Gold Butte ACEC creosote bursage restoration response indicators would be assessed on an annual basis following solar long-term monitoring protocols.

5. *For unavoidable impacts that may occur but are not determined to warrant compensatory off-site mitigation, apply monitoring and adaptive management principles similar to the following:*

    Example: While no off-site mitigation objective is proposed for some potential unavoidable impacts, an elevated level of monitoring would facilitate timely detection of unanticipated impacts and addition of conditional stipulations in the ROW grant to afford prompt and effective remediation.

6. Vet with the IDT and stakeholders and modify as appropriate.

Process - Screening and Selection of Candidate Sites to Direct Off-site Mitigation Investments

1. *Identify, consider, and screen the full range of mitigation tools available to achieve regional mitigation goal and objectives*, including but not limited to:
    - restoration and enhancement activities,
    - land acquisition,
    - mitigation banking,
    - withdrawing BLM-administered lands from other uses, and
    - special land designations or uses.

2. *Identify and assess alternative candidate mitigation sites (recommendation 3-10) that meet regional mitigation goals and objectives as well as the following prioritization criteria:*
    - SEZ ecoregion & ecological subregion
        - Adopt the same priorities
    - SEZ Endangered Species Act recovery unit
        - Adopt the same priorities
    - SEZ ESA state –
        - Adopt the same priorities when mitigating for a threatened or endangered, or candidate species to avoid complications arising from multi-state, multi-agency coordination
    - Hydrologic basin:
        - Defer to state water authorities: where compensation for groundwater pumping from a bi-state basin extends to the adjoining state or where all regulatory agencies with authority over mitigation approvals determine that the best place to achieve the goals and objectives of the mitigation occurs in a neighboring state.
    - Geographic distribution of the species or feature being impacted.
        - If the least common and most geographically restricted species or feature limits regional mitigation candidate areas to places that do not meet all mitigation needs, it may be necessary to mitigate for this species or feature separately and in addition to the regional mitigation obligations. If the least common and most geographically restricted species or feature cannot be mitigated for offsite, then this species or feature should be avoided
    - SEZ similarity in terms of landscape value, ecological functionality, biological value, species, habitat types and natural features
        - As characterized by topography, hydrology, geology, plant communities, and lands with wilderness characteristics
    - Land configuration, level of protection, and extent
        - Contiguous blocks, and/or lands contiguous to or within much larger protected areas

3. *Assess, rank, and prioritize which combination of candidate mitigation sites (locations) and tools or approaches best meet mitigation objectives. Assessment, ranking, and prioritization criteria should consider:*

    - Best available scientific information at time of planning

        - Is there sufficient local or site-level information on mitigation approach, context, and area to justify mitigation investment?
    - Site-specific mitigation action requirements
        - What actions would need to be taken at each of the identified mitigation candidate sites to achieve the regional mitigation goals and objectives?
            - Land acquisition?
            - Restoration activities?
            - Other public land management actions on public land?
            - Congressional action?
    - Feasibility, durability, risk, and likelihood of long-term success of regional mitigation approach and site
        - Will mitigation measures at the candidate mitigation sites to achieve primary regional mitigation goals and objectives?
        - What is the period of time needed to achieve mitigation goals & objectives?
        - What are constraints?
        - What threats does the site location face and what is the relative risk?
    - Opportunity for combined regional mitigation goals & objectives
        - What is the extent to which mitigation goals for additional ecological and other resource values can be achieved in a single location (e.g., biological, ecological, cultural, military, recreation etc.)?
    - Surrounding land use impact on regional mitigation goals & objectives
        - How/whether surrounding land uses are likely to enhance mitigation benefits over time?
    - Presence of ecologically or biologically unique or valuable features
        - Does the site include aquatic and riparian habitats supplied by perennial, protected sources of water?
        - Does the location afford distinct or unique assemblages of species or communities or locations that provide valuable ecosystem services ?
        - Are there rare plant assemblages? Desert washes? Ephemeral playas?
        - Does the site include high-quality habitat for, and healthy populations of, both target species (especially special status species) and non-target species.?
    - Contribution to the permanence of conservation and biodiversity protections
        - Does the location offer assured long-term protection of conservation values?
        - Does the site accommodate scarcity or rarity of biological or ecological features to promote conservation?
    - Cost effectiveness, complexity, and political considerations
        - Does the site offer a positive return and value in terms of time and investment?
        - What are the trade-offs in terms of time and resources if either or both mitigation approach and site are complex, controversial?

4. Propose the area or areas which represent the best regional locations for mitigation investment and review with stakeholders.